

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for product fulfillment in an automated manufacturing system, the method comprising the steps of:

- a) obtaining requirements for a product from a customer;
- b) creating a manufacturing product plan from the requirements using a descriptive language, wherein the plan integrates the requirements with population rules that determine a sequence for manufacturing the product, and configuration rules that determine proper configuration settings; wherein the automated manufacturing system is capable of interpreting the descriptive language; and
- c) conveying the manufacturing product plan to the automated manufacturing system, wherein the automated manufacturing system interprets the manufacturing product plan and builds the product satisfying the requirements.

2. (Original) The method of claim 1, wherein the descriptive language is hierarchical and object oriented.

3. (Original) The method of claim 2, wherein the descriptive language describes the product by a plurality of objects, each object of the plurality of objects having an attribute, and the attribute being assigned a value.

4. (Original) The method of claim 3, wherein each object identifies a component in the product, wherein the component can be either a physical part or a logical part.

5. (Original) The method of claim 4, wherein the descriptive language is capable of describing a hierarchical relationship between objects.

6. (Original) The method of claim 5, wherein the descriptive language is capable of describing a mechanical and electrical connection between objects.

7. (Cancelled)

8. (Original) The method of claim 1, wherein the automated manufacturing system includes a plurality of processes that use the plan to produce the product, the plurality of processes being software based.

9. (Original) The method of claim 8, wherein the conveying step c) further comprises the step of:

c1) providing a portion of the plan to a process of the plurality of processes, the portion being relevant to the process, thereby reducing the amount of information conveyed throughout the automated manufacturing system.

10. (Original) The method of claim 8, wherein one process of the plurality of processes is an assembly process, the assembly process including the step of generating assembly instructions from the plan.

11. (Original) The method of claim 10, wherein the assembly instructions are provided in a pictorial form such that an assembly worker can view the product assembled.

12. (Original) The method of claim 1, wherein obtaining step (a) further includes the step of entering the requirements through a user interface, the user interface being a web based front end ordering system.

13. (Original) The method of claim 1, wherein the plan is created automatically.

14. (Original) The method of claim 1 further comprising the step of (e) storing the plan for future repairs and maintenance.

15. (Currently amended) A method for product fulfillment in a configure-to-order automated manufacturing system, the method comprising the steps of:

- a) obtaining requirements for a product from a customer through a user interface;
- b) creating a ~~manufacturing product plan~~ from the requirements using a descriptive language, wherein ~~the plan integrates the requirements with population rules that determine a sequence for manufacturing the product, and configuration rules that determine proper configuration settings~~the automated manufacturing system is capable of interpreting the ~~descriptive language~~ and the descriptive language is hierarchical and object oriented; and
- c) conveying the ~~manufacturing product plan~~ to the automated manufacturing system, wherein the automated manufacturing system interprets the ~~manufacturing product plan~~ and builds the product satisfying the requirements.

16. (Original) The method of claim 15, wherein the descriptive language describes the product by a plurality of objects, each object of the plurality of objects having an attribute, and the attribute being assigned a value.

17. (Original) The method of claim 16, wherein each object identifies a component in the product, wherein the component can be either a physical part or a logical part.

18. (Original) The method of claim 17, wherein the descriptive language is capable of describing a hierarchical relationship between objects.

19. (Original) The method of claim 18, wherein the descriptive language is capable of describing a mechanical and electrical connection between objects.

20. (Original) The method of claim 15, wherein the automated manufacturing system includes a plurality of processes that use the plan to produce the product, the plurality of processes being software based.

21. (Original) The method of claim 20, wherein the conveying step c) further comprises the step of:

c1) providing a portion of the plan to a process of the plurality of processes, the portion being relevant to the process, thereby reducing the amount of information conveyed throughout the automated manufacturing system.

22. (Original) The method of claim 15, wherein obtaining step (a) further includes the

step of entering the requirements through a user interface, the user interface being a web based front end ordering system.

23. (Original) The method of claim 15 further comprising the step of (e) storing the plan for future repairs and maintenance.

24. (Currently amended) A method for product fulfillment in a configure-to-order computer manufacturing system, the method comprising the steps of:

- a) obtaining requirements for a computer product from a customer through a user interface;
- b) automatically creating a manufacturing product plan from the requirements using a descriptive language, wherein the plan integrates the requirements with population rules that determine a sequence for manufacturing the product, and configuration rules that determine proper configuration settings; wherein the automated manufacturing system is capable of interpreting the descriptive language; and
- c) conveying the manufacturing product plan to the automated manufacturing system, wherein the automated manufacturing system interprets the manufacturing product plan and builds the computer product satisfying the requirements.

25. (Original) The method of claim 24, wherein the descriptive language is hierarchical and object oriented.

26. (Original) The method of claim 25, wherein the descriptive language describes the computer by a plurality of objects, each object of the plurality of objects having an attribute, and the attribute being assigned a value.

27. (Original) The method of claim 26, wherein each object identifies a component in the customized computer, wherein the component can be either a physical part or a logical part.

28. (Original) The method of claim 24, wherein requirements include hardware parts, software parts, service parts, and personalized data.

29. (Original) The method of claim 28, wherein the personalized data includes an IP address, a computer name, and slot preferences.

30. (Original) The method of claim 29, wherein the obtaining step (a) further includes the steps of:

a1) entering a plurality of part numbers, each part number corresponding to a hardware part, a software part, or a service part; and

a2) entering the personalized data.

31. (Original) The method of claim 30, wherein the plurality of part numbers and personalized data is automatically converted into the descriptive language to form the plan.

32. (Original) The method of claim 31, wherein the automated manufacturing system includes a plurality of processes that use the plan to produce the computer product, the plurality

of processes being software based.

33. (Original) The method of claim 32, wherein one process of the plurality of processes is an assembly process, the assembly process including the step of generating assembly instructions from the plan.

34. (Original) The method of claim 33, wherein the assembly instructions are provided in a pictorial form such that an assembly worker can view the computer product assembled, including the slot preferences for the hardware parts.

35. (Original) The method of claim 24, wherein the user interface is a web based front end ordering system.

36. (Original) The method of claim 24 further comprising the step of (e) storing the plan for future repairs and maintenance.

37. (Currently amended) A configure-to-order automated manufacturing system, comprising:

a user interface for obtaining requirements for a product from a customer;

an order processing system for automatically creating a ~~manufacturing product plan~~ from the requirements using a descriptive language, wherein the plan integrates the requirements with population rules that determine a sequence for manufacturing the product, and configuration rules that determine proper configuration settings; wherein the automated manufacturing system is capable of interpreting the descriptive language; and

a plurality of processes for manufacturing the product from the manufacturing plan.

38. (Original) The system of claim 37, wherein the descriptive language is hierarchical and object oriented.

39. (Original) The system of claim 38, wherein the descriptive language describes the product by a plurality of objects, each object of the plurality of objects having an attribute, and the attribute being assigned a value.

40. (Original) The system of claim 39, wherein each object identifies a component in the product, and wherein the component can be either a physical part or a logical part.

41. (Original) The system of claim 40, wherein the descriptive language is capable of describing a hierarchical relationship between objects.

42. (Original) The system of claim 41, wherein the descriptive language is capable of describing a mechanical and electrical connection between objects.

43. (Original) The system of claim 37, wherein each process of the plurality of processes is provided a portion of the plan, the portion being relevant to the process, thereby reducing the amount of data conveyed throughout the manufacturing system.

44. (Original) The system of claim 43, wherein one process of the plurality of processes is an assembly process that generates assembly instructions from the plan.



45. (Original) The system of claim 44, wherein the assembly instructions are provided in a pictorial form such that an assembly worker can view the product assembled.

46. (Original) The system of claim 37, wherein the user interface is a web based front end ordering system.

47. (Original) The system of claim 37 further comprising a database for storing the plan for future repairs and maintenance.

48. (Currently amended) A computer readable medium containing program instructions for product fulfillment in a configure-to-order automated manufacturing system, the program instructions for:

- a) obtaining requirements for a product from a customer through a user interface;
- b) creating a ~~manufacturing product plan~~ from the requirements using a descriptive language, ~~wherein the plan integrates the requirements with population rules that determine a sequence for manufacturing the product, and configuration rules that determine proper configuration settings; wherein the automated manufacturing system is capable of interpreting the descriptive language;~~
- c) conveying the ~~manufacturing product plan~~ to the automated manufacturing system, wherein the automated manufacturing system interprets the ~~manufacturing product plan~~ and builds the product satisfying the requirements; and
- (e) storing the ~~manufacturing product plan~~ for future repairs and maintenance.

49. (Original) The computer readable medium of claim 48, wherein the descriptive language is hierarchical and object oriented, and describes the product by a plurality of objects, each object of the plurality of objects having an attribute, and the attribute being assigned a value.

50. (Original) The computer readable medium of claim 49, wherein each object identifies a component in the product, and wherein the component can be either a physical part or a logical part.

51. (Original) The computer readable medium of claim 48, wherein the automated manufacturing system includes a plurality of processes that use the plan to produce the product, the plurality of processes being software based.

52. (Original) The computer readable medium of claim 51, wherein the conveying instruction (c) further comprises the instruction of:

c1) providing a portion of the plan to each process of the plurality of processes, the portion being relevant to the process, thereby reducing the amount of information conveyed throughout the automated manufacturing system.

53. (Original) The computer readable medium of claim 51, wherein one process of the plurality of processes is an assembly process, the assembly process including the instruction of generating assembly instructions from the plan.

54. (Original) The computer readable medium of claim 53, wherein the assembly instructions are provided in a pictorial form such that an assembly worker can view the product assembled.

55. (Currently amended) A method for describing a product for manufacture, comprising the steps of:

a) providing a descriptive language, wherein an automated manufacturing system is capable of interpreting the descriptive language and the descriptive language is hierarchical and object oriented; and

b) using the descriptive language to create a ~~manufacturing product plan~~ that describes the product, wherein the plan integrates customer requirements with population rules that determine a sequence for manufacturing the product, and configuration rules that determine proper configuration settings.

56. (Original) The method of claim 55, wherein the descriptive language describes the product by a plurality of objects, each object of the plurality of objects having an attribute, and the attribute being assigned a value.

57. (Original) The method of claim 56, wherein each object identifies a component in the product, wherein the component can be either a physical part or a logical part.

58. (Original) The method of claim 57, wherein the descriptive language is capable of describing a hierarchical relationship between objects.

59. (Original) The method of claim 58, wherein the descriptive language is capable of describing a mechanical and electrical connection between objects.